

AMENDMENTS TO THE CLAIMS

Please cancel claims 16-20 and 23-24 without prejudice or disclaimer of the subject matter set forth therein.

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-8. (canceled)

9. (withdrawn) A method for producing a protein comprising the steps of:

introducing, into a host cell producing virus particles, a recombinant vector in which a fusion polynucleotide sequence comprising a first polynucleotide encoding a protein having a plurality of membrane-spanning segments and a second polynucleotide encoding a desired protein is incorporated;

expressing said fusion polynucleotide sequence in said host cell to produce said desired protein fused with said protein having a plurality of membrane-spanning segments, the produced fusion protein being bound to said virus particle; and

recovering said virus particle to which said fusion protein comprising said desired protein is bound.

10. (withdrawn) The method according to claim 9, wherein said fusion polynucleotide sequence comprises, in the order mentioned

from upstream end, said first polynucleotide encoding said protein having a plurality of membrane-spanning segments and said second polynucleotide encoding said desired protein.

11. (withdrawn) The method according to claim 10, wherein said virus is baculovirus and said host cell is an insect cell.

12. (withdrawn) The method according to any one of claims 9 to 11, wherein said fusion protein is bound to said virus particle such that at least an active region of said desired protein is exposed to the outside of said virus particle.

13. (withdrawn) The method according to claim 9, wherein said protein having a plurality of membrane-spanning segments is a protein having an odd number of membrane-spanning segments, and said desired protein does not have a membrane-spanning segment.

14. (withdrawn) The method according to claim 13, wherein said protein having a plurality of membrane-spanning segments is a chemokine receptor CCR3.

15. (withdrawn) The method according to claim 9, further comprising the steps of cleaving the recovered fusion protein to separate said desired protein from said protein having a

plurality of membrane-spanning segments, thereby detaching said desired protein from said virus particle; and recovering the separated desired protein.

16-24. (canceled).

Please add the following new claims

25. (new) A method for producing a fusion protein comprising the steps of:

introducing into an insect cell a recombinant vector in which a fusion polynucleotide sequence comprising a first polynucleotide encoding a coat protein of a baculovirus and a second polynucleotide encoding a desired protein is incorporated wherein said first polynucleotide is to a 5' side of said second polynucleotide encoding said desired protein;

expressing said polynucleotide sequence in said insect cell to produce said fusion protein; and

recovering said fusion protein wherein said coat protein of baculovirus is gp64 having a membrane-spanning segment and wherein said desired protein is selected from the group consisting of a glycosyltransferase, a sialic acid transferase, a galactosyltransferase, a sulfotransferase, and a type II membrane protein.

26. (new) The method of claim 25, wherein the desired protein is glycosyltransferase.

27. (new) The method of claim 26, wherein said desired protein is a glycosyltransferase selected from the group consisting of any of fucosyltransferases 1 to 9 and any of N-acetylglucosaminyltransferases I to IV.

28. (new) The method of claim 25, wherein said desired protein is a sulfotransferase and the sulfotransferase is selected from the group consisting of heparan sulfate N-sulfotransferase and cerebroside sulfotransferase.

29. (new) A method for producing a fusion protein comprising the steps of:

introducing into an insect cell a recombinant vector comprising a fusion polynucleotide sequence comprising a first polynucleotide encoding a protein constituting a virus particle and a second polynucleotide encoding a desired protein, wherein said first polynucleotide is to a 5' side of said second polynucleotide encoding said desired protein, and wherein said polynucleotide encoding a protein constituting a virus particle and said polynucleotide encoding said desired protein has been isolated and amplified by a pair of primers, which is selected

from the group consisting of pair of SEQ ID NO: 3 and SEQ ID NO: 4 that gives α -(1,3/1,4)fucosyltransferase (FUT3), pair of SEQ ID NO: 5 and SEQ ID NO: 6 that gives gp64, pair of SEQ ID NO: 9 and SEQ ID NO: 10 that gives N-acetylglucosaminyltransferase V (GnTV), pair of SEQ ID NO: 9 and SEQ ID NO: 11 that gives GnTV, and pair of SEQ ID NO: 12 and SEQ ID NO: 13 that gives FUT3;

expressing said polynucleotide sequence in said insect cell to produce the fusion protein; and

recovering said fusion protein wherein said virus particle is gp64 having a membrane-spanning segment and wherein said desired protein is selected from the group consisting of FUT3 and GnTV.

30. (new) The method according to claim 25, wherein said desired protein is fused with said virus particle such that at least an active region of said desired protein is exposed to the outside of said virus particle.

31. (new) The method according to claim 25, further comprising the steps of cleaving the recovered fusion protein to separate said desired protein from said virus particle; and recovering the separated desired protein.